



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

**Division of Facilities Construction and Management**

DFCM

## **Request For Bids For Construction Services**

### **Two-Stage Bidding Process**

#### **Stage II – Roofing Contractors Bidders List Invitation to Bid**

February 7, 2006

# **LEHI ARMORY REROOF UTAH NATIONAL GUARD LEHI, UTAH**

DFCM Project No. 05122470

McNeil Consulting Engineering, L.C.  
6825 South 900 East  
Midvale, Utah 84047  
Phone: (801)255-7700  
Fax: (801)255-8071

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Current copies of the following documents are hereby made part of these contract documents by reference. These documents are available on the DFCM web site at <http://dfcm.utah.gov> or are available upon request from DFCM:

DFCM General Conditions dated May 25, 2005

DFCM Application and Certificate for Payment dated May 25, 2005

Technical Specifications & Drawings: McNeil Consulting Engineering, L.C.  
6825 South 900 East  
Midvale, Utah 84047  
Phone: (801)255-7700  
Fax: (801)255-8071

**The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at <http://dfcm.utah.gov>**

## **INVITATION TO BID**

**ONLY CONTRACTORS PREVIOUSLY SHORT-LISTED DURING STAGE I  
ARE ALLOWED TO BID ON THIS PROJECT**

The State of Utah - Division of Facilities Construction and Management (DFCM) is requesting bids for the construction of the following project:

**LEHI ARMORY REROOF**  
**UTAH NATIONAL GUARD – LEHI, UTAH**  
**DFCM PROJECT NO: 05122470**

Project consists of installing a new roof on the Lehi National Guard Armory per plans and specifications provided. Construction cost estimate: \$130,000.00.

<b><u>FIRM NAME</u></b>	<b><u>POINT OF CONTACT</u></b>	<b><u>PHONE</u></b>	<b><u>FAX</u></b>
All Weather	Mr. Delmar Johnson	(801) 467-4270	(801) 467-3961
Capitol Roofing Service	Mr. Stewart B. Paulsen	(801) 562-5568	(801) 562-1159
Conwest, Inc	Mr. Phil Scarborough	(801) 553-0640	(815) 550-1136
Clark Quality Roofing	Mr. Perry Clark	(801) 266-3575	(801) 266-3692
Dave Atkinson Roofing, Inc.	Mr. Dave Atkinson	(435) 770-4299	(435) 258-2225
Heritage Roofing, LC	Mr. James Smith	(801) 576-8447	(801) 576-8311
Island Heights Construction, Inc	Mr. Terry Cronquist	(435) 753-7403	(435) 753-7452
Kendrick Brothers Roofing, Inc.	Mr. Brad L. Kendrick	(801) 731-2000	(801) 731-2020
Pitt Roofing & Construction, Inc.	Mr. Stacy Galley	(435) 789-6898	(435) 789-2802
Redd Roofing Company	Mr. K. Frank Redd	(801) 621-1363	(801) 621-1540
Summit Roofing & Waterproofing	Mr. Phil Whiting	(801) 529-2596	(801) 732-2186
Superior Roofing and Sheet Metal, Inc	Mr. Blake Redd	(801) 266-1473	(801) 266-1522
Utah Tile and Roofing, Inc	Mr. Paul Seppi	(801) 266-9694	(801) 266-6836

The bid documents will be available on Tuesday, February 7, 2006, in electronic format from DFCM at 4110 State Office Building, Salt Lake City, Utah 84114, telephone (801)538-3018 and on the DFCM web page at <http://dfcm.utah.gov>. For questions regarding this project, please contact Brent Lloyd, Project Manager, DFCM, at (801)538-3471. No others are to be contacted regarding this project.

A **MANDATORY** pre-bid meeting and site visit will be held at 1:00 PM on Tuesday, February 14, 2006 at the Lehi National Guard Armory, 348 East Main Street, Lehi, Utah. All short listed prime contractors wishing to bid on this project **must** attend this meeting.

Bids must be submitted by 2:00 PM on Wednesday, February 22, 2006, to DFCM. **DURING THE 2006 LEGISLATIVE SESSION, THE BIDS WILL BE RECEIVED, OPENED, AND READ ALOUD IN THE CONFERENCE CENTER BUILDING AT THE UTAH STATE FAIRPARK, 155 NORTH 1000 WEST, SALT LAKE CITY, UTAH.** Note: Bids must be received at the Conference Center Building at the Utah State Fairpark by the specified time. The contractor shall comply with and require all of its subcontractors to comply with the license laws as required by the State of Utah. A bid bond in the amount of five percent (5%) of the bid amount, made payable to the Division of Facilities Construction and Management on DFCM's bid bond form, shall accompany the bid. The Division of Facilities Construction & Management reserves the right to reject any or all bids or to waive any formality or technicality in any bid in the interest of the State.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT  
MARLA WORKMAN, CONTRACT COORDINATOR  
4110 State Office Bldg., Salt Lake City, Utah 84114

## **STAGE II BIDDING PROCESS**

### **ONLY CONTRACTORS PREVIOUSLY SHORT-LISTED DURING STAGE I ARE ALLOWED TO BID ON THIS PROJECT**

#### **1. Invitational Bid Procedures**

Invitation to Bid: DFCM will notify each short-listed firm via e-mail and/or fax when a project is ready for construction services.

Bid Documents: Bidding documents including plans and specifications (if applicable) may be obtained by accessing DFCM's web page at <http://dfcm.utah.gov> or at DFCM's office 4110 State Office Building, Salt Lake City, Utah 84114.

Mandatory Pre-Bid Site Meeting: If required, the schedule contained in this document will indicate the date, time, and place of the mandatory pre-bid site meeting. At this meeting, contractors will receive additional instructions about the project and have an opportunity to ask questions about project details. If a firm fails to attend a pre-bid site meeting labeled "Mandatory" they will not be allowed to bid on the project.

Written Questions: The schedule contained in this document will indicate the deadline for submitting questions in writing to the DFCM Representative pertaining to this project.

Final Addendum: The schedule contained in this document will indicate the deadline for DFCM issuing the final addendum clarifying questions and changes to the scope of work. Contractors are responsible for obtaining and responding to information contained in the addenda.

Submitting Bids: Bids must be submitted to DFCM by the deadline indicated on the schedule contained in this document. **DURING THE 2006 LEGISLATIVE SESSION, THE BIDS WILL BE RECEIVED, OPENED, AND READ ALOUD IN THE CONFERENCE CENTER BUILDING AT THE UTAH STATE FAIRPARK, 155 NORTH 1000 WEST, SALT LAKE CITY, UTAH.** Bids submitted after the deadline will not be accepted. (Additional information pertaining to bidding is contained later in this document).

Subcontractors List: The firm selected for the project must submit a list of all subcontractors by the deadline indicated on the schedule contained in this document. (Additional information pertaining to subcontractor lists is contained later in this document)

#### **2. Drawings and Specifications, Other Contract Documents**

Drawings and Specifications, as well as other available Contract Documents, may be obtained as stated in the Notice to Contractors.

3. **Bids**

Before submitting a bid, each bidder shall carefully examine the Contract Documents; shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the bid the cost of all items required by the Contract Documents. If the bidder observes that portions of the Contract Documents are at variance with applicable laws, building codes, rules, regulations or contain obvious erroneous or uncoordinated information, the bidder shall promptly notify the DFCM Representative and the necessary changes shall be accomplished by Addendum.

The bid, bearing original signatures, must be typed or handwritten in ink on the Bid Form provided in the procurement documents and submitted in a sealed envelope at the location specified by the Notice to Contractor's prior to the published deadline for the submission of bids.

Bid bond security, in the amount of five percent (5%) of the bid, made payable to the Division of Facilities Construction and Management, shall accompany bid. **THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID.**

If the bid bond security is submitted on a bid bond form other than the DFCM's required bid bond form, and the bid security meets all other legal requirements, the bidder will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. **Note: A cashier's check cannot be used as a substitute for a bid bond.**

4. **Contract and Bond**

The Contractor's Agreement will be in the form bound in the specifications. The Contract Time will be as indicated in the bid. The successful bidder, simultaneously with the execution of the Contract Agreement, will be required to furnish a performance bond and a payment bond, both bearing original signatures, upon the forms provided in the procurement documents. The performance and payment bonds shall be for an amount equal to one hundred percent (100%) of the Contract Sum and secured from a company that meets the requirements specified in the requisite forms. Any bonding requirements for Subcontractors will be specified in the Supplementary General Conditions.

5. **Listing of Subcontractors**

Listing of Subcontractors shall be as summarized in the “Instructions and Subcontractor’s List Form”, which are included as part of these Contract Documents. The subcontractors list shall be delivered to DFCM or faxed to DFCM at (801)538-3677 within 24 hours of the bid opening. Requirements for listing additional subcontractors will be listed in the Contract Documents.

DFCM retains the right to audit or take other steps necessary to confirm compliance with requirements for the listing and changing of subcontractors. Any contractor who is found to not be in compliance with these requirements is subject to a debarment hearing and may be debarred from consideration for award of contract for a period of up to three years.

6. **Interpretation of Drawings and Specifications**

If any person or entity contemplating submitting a bid is in doubt as to the meaning of any part of the drawings, specifications or other Contract Documents, such person shall submit to the DFCM Representative a request for an interpretation thereof. The person or entity submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by Addenda duly issued and a copy of such Addenda will be mailed or delivered to each person or entity receiving a set of documents. Neither DFCM nor A/E will be responsible for any other explanations or interpretations of the proposed documents. A/E shall be deemed to refer to the architect or engineer hired by DFCM as the A/E or Consultant for the Project.

7. **Addenda**

Any Addenda issued during the time of bidding shall become part of the Contract Documents made available to the bidders for the preparation of the bid, shall be covered in the bid, and shall be made a part of the Contract.

8. **Award of Contract**

The Contract will be awarded as soon as possible to the lowest, responsive and responsible bidder, based on the lowest combination of base bid and acceptable prioritized alternates, provided the bid is reasonable, is in the interests of the State of Utah to accept and after applying the Utah Preference Laws in U.C.A. Title 63, Chapter 56. The DFCM reserves the right to waive any technicalities or formalities in any bid or in the bidding. Alternates will be accepted on a prioritized basis with Alternate 1 being highest priority, Alternate 2 having second priority, etc.

9. **DFCM Contractor Performance Rating**

DFCM will evaluate the performance of the Contractor. This evaluation may include comments from the User. The Contractor will have an opportunity to review and comment on the evaluation. Evaluations, including the Contractor's comments, may be considered in future selection in the evaluation of the Contractor's past performance.

10. **Licensure**

The Contractor shall comply with and require all of its Subcontractors to comply with the license laws as required by the State of Utah.

11. **Right to Reject Bids**

DFCM reserves the right to reject any or all Bids.

12. **Time is of the Essence**

The completion deadline for this project is **Friday, June 30, 2006**. Failure to meet the completion deadline may result in a poor performance rating from DFCM which may have a negative impact on your firm's ability to obtain future work with the state of Utah and may also result in liquidated damages being assessed. Time is of the essence in regard to all the requirements of the Contract Documents.

13. **Withdrawal of Bids**

Bids may be withdrawn on written request received from bidders within 24 hours after the bid opening if the contractor has made an error in preparing the bid.

14. **Product Approvals**

Where reference is made to one or more proprietary products in the Contract Documents, but restrictive descriptive materials of one or more manufacturer(s) is referred to in the Contract Documents, the products of other manufacturers will be accepted, provided they equal or exceed

the standards set forth in the drawings and specifications and are compatible with the intent and purpose of the design, subject to the written approval of the A/E. Such written approval must occur prior to the deadline established for the last scheduled addenda to be issued. The A/E's written approval will be in an issued Addendum. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design as determined by the A/E.

15. **Financial Responsibility of Contractors, Subcontractors and Sub-subcontractors**

Contractors shall respond promptly to any inquiry in writing by the DFCM to any concern of financial responsibility of the Contractor, Subcontractor or Sub-subcontractor.

16. **Debarment.**

By submitting a bid, the Contractor certifies that neither it nor its principals, including project and site managers, have been, or are under consideration for, debarment or suspension, or any action that would exclude such from participation in a construction contract by any governmental department or agency. If the Contractor cannot certify this statement, attach to the bid a detailed written explanation which must be reviewed and approved by the DFCM as part of the requirements for award of the Project.



**Division of Facilities Construction and Management****PROJECT SCHEDULE**  
**Stage II = Two-Stage Bidding Process**

<b>PROJECT NAME:</b> LEHI ARMORY REROOF UTAH NATIONAL GUARD – LEHI, UTAH				
<b>DFCM PROJECT #</b> 05122470				
Event	Day	Date	Time	Place
Stage II Bidding Documents Available	Tuesday	February 7, 2006		DFCM, 4110 State Office Building, SLC, UT and DFCM web site *
<b>Mandatory</b> Pre-bid Site Meeting	Tuesday	February 14, 2006	1:00 PM	Lehi Armory 348 East Main Street Lehi, Utah
Last Day to Submit Questions	Friday	February 17, 2006	4:00 PM	DFCM, 4110 State Office Bldg, SLC, UT
Final Addendum Issued	Monday	February 20, 2006	4:00 PM	DFCM, 4110 State Office Bldg, SLC, UT or DFCM web site*
Prime Contractors Turn in Bid and Bid Bond	Wednesday	February 22, 2006	2:00 PM	Conference Center Building Utah State Fairpark 155 North 1000 West Salt Lake City, UT **
Subcontractors List Due	Thursday	February 23, 2006	2:00 PM	DFCM, 4110 State Office Bldg, SLC, UT FAX 801-538-3677
Project Completion Date	Friday	June 30, 2006	4:00 PM	

\* DFCM's web site address is <http://dfcm.utah.gov>

\*\* Due to the limited parking on Capitol Hill and anticipated shortage of parking during the 2006 Legislative Session, all bids will be received, opened, and read at the Conference Center at the Utah State Fairpark. Refer to map on the DFCM web site for directions ([http://dfcm.utah.gov/project\\_center/ads\\_solicitations.htm](http://dfcm.utah.gov/project_center/ads_solicitations.htm))



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

**Division of Facilities Construction and Management**

**DFCM**

**BID FORM**

NAME OF BIDDER \_\_\_\_\_ DATE \_\_\_\_\_

To the Division of Facilities Construction and Management  
4110 State Office Building  
Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Contractors" and in accordance with the Request for Bids for the **LEHI ARMORY REROOF- UTAH NATIONAL GUARD – LEHI, UTAH – DFCM PROJECT NO. 05122470** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: \_\_\_\_\_

For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

\_\_\_\_\_ DOLLARS (\$\_\_\_\_\_)   
(In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by **June 30, 2006** after receipt of the Notice to Proceed, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of **\$250.00** per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of \_\_\_\_\_

The undersigned Contractor's License Number for Utah is \_\_\_\_\_.

BID FORM  
PAGE NO. 2

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract. The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within time set forth.

Type of Organization:

\_\_\_\_\_  
(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

\_\_\_\_\_

Respectfully submitted,

\_\_\_\_\_  
Name of Bidder

ADDRESS:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Authorized Signature

## BID BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

### KNOW ALL PERSONS BY THESE PRESENTS:

That \_\_\_\_\_ hereinafter referred to as the "Principal," and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ and authorized to transact business in this State and U. S. Department of the Treasury Listed, (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the STATE OF UTAH, hereinafter referred to as the "Obligee," in the amount of \$ \_\_\_\_\_ (5% of the accompanying bid), being the sum of this Bond to which payment the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH** that whereas the Principal has submitted to Obligee the accompanying bid incorporated by reference herein, dated as shown, to enter into a contract in writing for the \_\_\_\_\_ Project.

**NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH**, that if the said principal does not execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the principal, then the sum of the amount stated above will be forfeited to the State of Utah as liquidated damages and not as a penalty; if the said principal shall execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the Principal, then this obligation shall be null and void. It is expressly understood and agreed that the liability of the Surety for any and all defaults of the Principal hereunder shall be the full penal sum of this Bond. The Surety, for value received, hereby stipulates and agrees that obligations of the Surety under this Bond shall be for a term of sixty (60) days from actual date of the bid opening.

**PROVIDED, HOWEVER**, that this Bond is executed pursuant to provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to same extent as if it were copied at length herein.

**IN WITNESS WHEREOF**, the above bounden parties have executed this instrument under their several seals on the date indicated below, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**DATED** this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**Principal's name and address (if other than a corporation):**

\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**Principal's name and address (if a corporation):**

\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_  
(Affix Corporate Seal)

**Surety's name and address:**

\_\_\_\_\_  
\_\_\_\_\_

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

By: \_\_\_\_\_  
Attorney-in-Fact (Affix Corporate Seal)

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me \_\_\_\_\_, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission Expires: \_\_\_\_\_

Resides at: \_\_\_\_\_

Agency: \_\_\_\_\_  
Agent: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

NOTARY PUBLIC

Approved As To Form: May 25, 2005  
By Alan S. Bachman, Asst Attorney General

**Division of Facilities Construction and Management****INSTRUCTION AND SUBCONTRACTORS LIST FORM**

The three low bidders, as well as all other bidders that desire to be considered, are required by law to submit to DFCM within 24 hours of bid opening a list of **ALL** first-tier subcontractors, including the subcontractor's name, bid amount and other information required by Building Board Rule and as stated in these Contract Documents, on the following basis:

**PROJECTS UNDER \$500,000 - ALL SUBS \$20,000 OR OVER MUST BE LISTED**  
**PROJECTS \$500,000 OR MORE - ALL SUBS \$35,000 OR OVER MUST BE LISTED**

- Any additional subcontractors identified in the bid documents shall also be listed.
- The DFCM Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Bidder may not list more than one subcontractor to perform the same work.
- Bidder must list "Self" if performing work itself.

**LICENSURE:**

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Bidder shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide only materials, equipment, or supplies to a contractor or subcontractor.

**BIDDER LISTING 'SELF' AS PERFORMING THE WORK:**

Any bidder that is properly licensed for the particular work and intends to perform that work itself in lieu of a subcontractor that would otherwise be required to be on the subcontractor list, must insert the term 'Self' for that category on the subcontractor list form. Any listing of 'Self' on the sublist form shall also include the amount allocated for that work.

**'SPECIAL EXCEPTION':**

A bidder may list 'Special Exception' in place of a subcontractor when the bidder intends to obtain a subcontractor to perform the work at a later date because the bidder was unable to obtain a qualified or reasonable bid under the provisions of U.C.A. Section 63A-5-208(4). The bidder shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the bidder's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the bidder was unable to obtain a qualified subcontractor bid. The Director must find that the bidder complied in good faith with State law requirements for any 'Special Exception' designation, in order for the bid to be considered. If awarded the contract, the Director shall supervise the bidder's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

**INSTRUCTIONS AND SUBCONTRACTORS LIST FORM**  
**Page No. 2**

**GROUND FOR DISQUALIFICATION:**

The Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law. Director may withhold awarding the contract to a particular bidder if one or more of the proposed subcontractors are considered by the Director to be unqualified to do the Work or for such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of the Director, the Director may provide notice to the contractor and the contractor shall have 24 hours to submit the correction to the Director. If such correction is submitted timely, then the sublist requirements shall be considered met.

**CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:**

Subsequent to twenty-four hours after the bid opening, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- (5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the Contractor establishes that the subcontractor is not qualified for the work.

**EXAMPLE:**

Example of a list where there are only four subcontractors:

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	"Self"	300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: 350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

**PURSUANT TO STATE LAW - SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS  
SUBCONTRACTOR LIST SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.**

**Division of Facilities Construction and Management****SUBCONTRACTORS LIST  
FAX TO 801-538-3677****PROJECT TITLE:** \_\_\_\_\_**Caution:** You must read and comply fully with instructions.

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #

We certify that:

1. This list includes all subcontractors as required by the instructions, including those related to the base bid as well as any alternates.
2. We have listed "Self" or "Special Exception" in accordance with the instructions.
3. All subcontractors are appropriately licensed as required by State law.

FIRM: \_\_\_\_\_

DATE: \_\_\_\_\_

SIGNED BY: \_\_\_\_\_

**NOTICE:** FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR DFCMS REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH BIDDER. ACTION MAY BE TAKEN AGAINST BIDDERS BID BOND AS DEEMED APPROPRIATE BY DFCM. ATTACH A SECOND PAGE IF NECESSARY.

## **FUGITIVE DUST PLAN**

The Contractor will fill out the form and file the original with the Division of Air Quality and a copy of the form with the Division of Facilities Construction & Management, prior to the issuance of any notice to proceed.

The Contractor will be fully responsible for compliance with the Fugitive Dust Control Plan, including the adequacy of the plan, any damages, fines, liability, and penalty or other action that results from noncompliance.



**Utah Division of Air Quality**

*April 20, 1999*

**GUIDANCE THAT MUST BE CONSIDERED IN DEVELOPING AND SUBMITTING A  
DUST CONTROL PLAN FOR COMPLIANCE WITH R307-309-3, 4, 5, 6, 7**

Source Information:

1. Name of your operation (source): provide a name if the source is a construction site.
2. Address or location of your operation or construction site.
3. UTM coordinates or Longitude/Latitude of stationary emission points at your operation.
4. Lengths of the project, if temporary (time period).
5. Description of process (include all sources of dust and fugitive dust). Please, if necessary, use additional sheets of paper for this description. Be sure to mark it as an attachment.
6. Type of material processed or disturbed.
7. Amount of material processed (tons per year, tons per month, lbs./hr., and applicable units).

8. Destination of product (where will the material produced be used or transported, be specific, provide address or specific location), information needed for temporary relocation applicants.
9. Identify the individual who is responsible for the implementation and maintenance of fugitive dust control measures. List name(s), position(s) and telephone number(s).
10. List, and attach copies of any contract lease, liability agreement with other companies that may, or will, be responsible for dust control on site or on the project.

**Description of Fugitive Dust Emission Activities**  
**(Things to consider in addressing fugitive dust control strategies.)**

1. Type of activities (drilling and blasting, road construction, development construction, earth moving and excavation, handling and hauling materials, cleaning and leveling, etc).
2. List type of equipment generating the fugitive dust.
3. Diagram the location of each activity or piece of equipment on site. Please attach the diagram.
4. Provide pictures or drawings of each activity. Include a drawing of the unpaved/paved road network used to move loads “on” and “off” property.
5. Vehicle miles travels on unpaved roads associated with the activity (average speed).
6. Type of dust emitted at each source (coal, cement, sand, soil, clay, dust, etc.)
7. Estimate the size of the release area at which the activity occurs (square miles). For haul or dirt roads include total miles of road in use during the activity.

## **Description of Fugitive Dust Emission Controls on Site**

Control strategies must be designed to meet 20% opacity or less on site (a lesser opacity may be defined by Approval Order conditions or federal requirements such as NSPS), and control strategies must prevent exceeding 10% opacity from fugitive dust at the property boundary (site boundary) for compliance with R307-309-3.

1. Types of ongoing emission controls proposed for each activity, each piece of equipment, and haul roads.
2. Types of additional dust controls proposed for bare, exposed surfaces (chemical stabilization, synthetic cover, wind breaks, vegetative cover, etc).
3. Method of application of dust suppressant.
4. Frequency of application of dust suppressant.
5. Explain what triggers the use of a special control measure other than routine measures already in place, such as covered loads or measures covered by a permit condition (increase in opacity, high winds, citizen complaints, dry conditions, etc).
6. Explain in detail what control strategies/measures will be implemented off-hours, i.e., Saturdays/Sundays/Holidays, as well as 6 PM to 6 AM each day.

## **Description of Fugitive Dust Control Off-site**

Prevent, to the maximum extent possible, deposition of materials, which may create fugitive dust on public and private paved roads in compliance with R307-309-5, 6, 7.

1. Types of emission controls initiated by your operation that are in place “off” property (application of water, covered loads, sweeping roads, vehicle cleaning, etc.).
  
2. Proposed remedial controls that will be initiated promptly if materials, which may create fugitive dust, are deposited on public and private paved roads.

Submit the Dust Control Plan to:

Executive Secretary  
Utah Air Quality Board  
POB 144820  
15 North 1950 West  
Salt Lake City, Utah 84114-4820

Phone: (801) 536-4000  
FAX: (801) 536-4099

## **Fugitive Dust Control Plan Violation Report**

When a source is found in violation of R307-309-3 or in violation of the Fugitive Dust Control Plan, the source must submit a report to the Executive Secretary within 15 days after receiving a Notice of Violation. The report must include the following information:

1. Name and address of dust source.
2. Time and duration of dust episode.
3. Meteorological conditions during the dust episode.
4. Total number and type of fugitive dust activities and dust producing equipment within each operation boundary. If no change has occurred from the existing dust control plan, the source should state that the activity/equipment is the same.
5. Fugitive dust activities or dust producing equipment that caused a violation of R-307-309-3 or the source's dust control plan.
6. Reasons for failing to control dust from the dust generating activity or equipment.
7. New and/or additional fugitive dust control strategies necessary to achieve compliance with R307-309-3, 4, 5, 6, or 7.
8. If it can not be demonstrated that the current approved Dust Control Plan can result in compliance with R307-309-3 through 7, the Dust Control Plan must be revised so as to demonstrate compliance with 307-309-3 through 7. Within 30 days of receiving a fugitive dust Notice of Violation, the source must submit the revised Plan to the Executive Secretary for review and approval.

Submit the Dust Control Plan to:

Executive Secretary	Phone: (801) 536-4000
Utah Air Quality Board	FAX: (801) 536-4099
POB 144820	
15 North 1950 West	
Salt Lake City, Utah 84114-4820	

Attachments: DFCM Form FDR R-307-309, Rule 307-309

## CONTRACTOR'S AGREEMENT

FOR:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THIS CONTRACTOR'S AGREEMENT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, hereinafter referred to as "DFCM", and \_\_\_\_\_, incorporated in the State of \_\_\_\_\_ and authorized to do business in the State of Utah, hereinafter referred to as "Contractor", whose address is \_\_\_\_\_.

WITNESSETH: WHEREAS, DFCM intends to have Work performed at \_\_\_\_\_  
\_\_\_\_\_.

WHEREAS, Contractor agrees to perform the Work for the sum stated herein.

NOW, THEREFORE, DFCM and Contractor for the consideration provided in this Contractor's Agreement, agree as follows:

**ARTICLE 1. SCOPE OF WORK.** The Work to be performed shall be in accordance with the Contract Documents prepared by \_\_\_\_\_ and entitled "\_\_\_\_\_  
\_\_\_\_\_."

The DFCM General Conditions ("General Conditions") dated May 25, 2005 on file at the office of DFCM and available on the DFCM website, are hereby incorporated by reference as part of this Agreement and are included in the specifications for this Project. All terms used in this Contractor's Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions.

The Contractor Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the Contractor to the DFCM hereunder is that of an independent Contractor.

**ARTICLE 2. CONTRACT SUM.** The DFCM agrees to pay and the Contractor agrees to accept in full performance of this Contractor's Agreement, the sum of \_\_\_\_\_ DOLLARS AND NO CENTS (\$\_\_\_\_\_.00), which is the base bid, and which sum also includes the cost of a 100%

CONTRACTOR'S AGREEMENT  
PAGE NO. 2

Performance Bond and a 100% Payment Bond as well as all insurance requirements of the Contractor. Said bonds have already been posted by the Contractor pursuant to State law. The required proof of insurance certificates have been delivered to DFCM in accordance with the General Conditions before the execution of this Contractor's Agreement.

**ARTICLE 3. TIME OF COMPLETION AND DELAY REMEDY.** The Work shall be Substantially Complete within \_\_\_\_\_ (\_\_\_\_) calendar days after the date of the Notice to Proceed. Contractor agrees to pay liquidated damages in the amount of \$\_\_\_\_\_ per day for each day after expiration of the Contract Time until the Contractor achieves Substantial Completion in accordance with the Contract Documents, if Contractor's delay makes the damages applicable. The provision for liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein because actual damages can not be readily ascertained at the time of execution of this Contractor's Agreement; (c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay damages, such as costs to complete or remedy defective Work.

No action shall be maintained by the Contractor, including its or Subcontractor or suppliers at any tier, against the DFCM or State of Utah for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions. The Contractor may receive a written extension of time, signed by the DFCM, in which to complete the Work under this Contractor's Agreement in accordance with the General Conditions.

**ARTICLE 4. CONTRACT DOCUMENTS.** The Contract Documents consist of this Contractor's Agreement, the Conditions of the Contract (DFCM General Conditions, Supplementary and other Conditions), the Drawings, Specifications, Addenda and Modifications. The Contract Documents shall also include the bidding documents, including the Notice to Contractors, Instructions to Bidders/Proposers and the Bid/Proposal, to the extent not in conflict therewith and other documents and oral presentations that are documented as an attachment to the contract.

All such documents are hereby incorporated by reference herein. Any reference in this Contractor's Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

**ARTICLE 5. PAYMENT.** The DFCM agrees to pay the Contractor from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The Contractor agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the



CONTRACTOR'S AGREEMENT  
PAGE NO. 3

Contractor requests payment and agrees to safeguard and protect such equipment or materials and is responsible for safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the Contractor at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. The retainage, including any additional retainage imposed and the release of any retainage, shall be in accordance with UCA 13-8-5 as amended. Contractor shall also comply with the requirements of UCA 13-8-5, including restrictions of retainage regarding subcontractors and the distribution of interest earned on the retention proceeds. The DFCM shall not be responsible for enforcing the Contractor's obligations under State law in fulfilling the retention law requirements with subcontractors at any tier.

**ARTICLE 6. INDEBTEDNESS.** Before final payment is made, the Contractor must submit evidence satisfactory to the DFCM that all payrolls, materials bills, subcontracts at any tier and outstanding indebtedness in connection with the Work have been properly paid. Final Payment will be made after receipt of said evidence, final acceptance of the Work by the DFCM as well as compliance with the applicable provisions of the General Conditions.

Contractor shall respond immediately to any inquiry in writing by DFCM as to any concern of financial responsibility and DFCM reserves the right to request any waivers, releases or bonds from Contractor in regard to any rights of Subcontractors (including suppliers) at any tier or any third parties prior to any payment by DFCM to Contractor.

**ARTICLE 7. ADDITIONAL WORK.** It is understood and agreed by the parties hereto that no money will be paid to the Contractor for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and the Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Contractor's Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

**ARTICLE 8. INSPECTIONS.** The Work shall be inspected for acceptance in accordance with the General Conditions.

**ARTICLE 9. DISPUTES.** Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

**ARTICLE 10. TERMINATION, SUSPENSION OR ABANDONMENT.** This Contractor's Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

**ARTICLE 11. DFCM'S RIGHT TO WITHHOLD CERTAIN AMOUNT AND MAKE USE THEREOF.** The DFCM may withhold from payment to the Contractor such amount as, in DFCM's judgment, may be necessary to pay just claims against the Contractor or Subcontractor at any tier for labor and services rendered and materials furnished in and about the Work. The DFCM may apply such withheld amounts for the payment of such claims in DFCM's discretion. In so doing, the DFCM shall be deemed the agent of Contractor and payment so made by the DFCM shall be considered as payment made under this Contractor's Agreement by the DFCM to the Contractor. DFCM shall not be liable to the Contractor for any such payment made in good faith. Such withholdings and payments may be made without prior approval of the Contractor and may be also be prior to any determination as a result of any dispute, PRE, Claim or litigation.

**ARTICLE 12. INDEMNIFICATION.** The Contractor shall comply with the indemnification provisions of the General Conditions.

**ARTICLE 13. SUCCESSORS AND ASSIGNMENT OF CONTRACT.** The DFCM and Contractor, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Contractor's Agreement. The Contractor shall not assign this Contractor's Agreement without the prior written consent of the DFCM, nor shall the Contractor assign any moneys due or to become due as well as any rights under this Contractor's Agreement, without prior written consent of the DFCM.

**ARTICLE 14. RELATIONSHIP OF THE PARTIES.** The Contractor accepts the relationship of trust and confidence established by this Contractor's Agreement and covenants with the DFCM to cooperate with the DFCM and A/E and use the Contractor's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

**ARTICLE 15. AUTHORITY TO EXECUTE AND PERFORM AGREEMENT.** Contractor and DFCM each represent that the execution of this Contractor's Agreement and the performance thereunder is within their respective duly authorized powers.

**ARTICLE 16. ATTORNEY FEES AND COSTS.** Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this Contractor's Agreement or recover damages or any other action as a result of a breach thereof.

CONTRACTOR'S AGREEMENT  
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**IN WITNESS WHEREOF**, the parties hereto have executed this Contractor's Agreement on the day and year stated hereinabove.

**CONTRACTOR:** \_\_\_\_\_

\_\_\_\_\_  
Signature Date

Title: \_\_\_\_\_

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

\_\_\_\_\_  
Please type/print name clearly

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me, \_\_\_\_\_, whose identity is personally known to me (or proved to me on the basis of satisfactory evidence) and who by me duly sworn (or affirmed), did say that he (she) is the \_\_\_\_\_ (title or office) of the firm and that said document was signed by him (her) in behalf of said firm.

(SEAL)

\_\_\_\_\_  
**Notary Public**

My Commission Expires \_\_\_\_\_

APPROVED AS TO AVAILABILITY  
OF FUNDS:

\_\_\_\_\_  
Financial Manager, Date  
Division of Facilities Construction  
and Management

**DIVISION OF FACILITIES  
CONSTRUCTION AND MANAGEMENT**

\_\_\_\_\_  
Manager - Date  
Capital \_\_\_\_\_

APPROVED AS TO FORM:  
ATTORNEY GENERAL  
May 25, 2005  
By: Alan S. Bachman  
Asst Attorney General

APPROVED FOR EXPENDITURE:

\_\_\_\_\_  
Division of Finance Date

**PERFORMANCE BOND**  
(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That \_\_\_\_\_ hereinafter referred to as the "Principal" and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ and authorized to transact business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah, hereinafter referred to as the "Obligee," in the amount of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered into a certain written Contract with the Obligee, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, to construct \_\_\_\_\_ in the County of \_\_\_\_\_, State of Utah, Project No. \_\_\_\_\_, for the approximate sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), which Contract is hereby incorporated by reference herein.

**NOW, THEREFORE**, the condition of this obligation is such that if the said Principal shall faithfully perform the Contract in accordance with the Contract Documents including, but not limited to, the Plans, Specifications and conditions thereof, the one year performance warranty, and the terms of the Contract as said Contract may be subject to Modifications or changes, then this obligation shall be void; otherwise it shall remain in full force and effect.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the state named herein or the heirs, executors, administrators or successors of the Owner.

The parties agree that the dispute provisions provided in the Contract Documents apply and shall constitute the sole dispute procedures of the parties.

**PROVIDED, HOWEVER**, that this Bond is executed pursuant to the Provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

**IN WITNESS WHEREOF**, the said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**WITNESS OR ATTESTATION:**

**PRINCIPAL:**

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

(Seal)

Title: \_\_\_\_\_

**WITNESS OR ATTESTATION:**

**SURETY:**

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

Attorney-in-Fact (Seal)

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me \_\_\_\_\_, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney in-fact of the above-named Surety Company and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My commission expires: \_\_\_\_\_

Resides at: \_\_\_\_\_

\_\_\_\_\_  
NOTARY PUBLIC

**Agency:** \_\_\_\_\_  
**Agent:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

Approved As To Form: May 25, 2005  
By Alan S. Bachman, Asst Attorney General

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# PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

## KNOW ALL PERSONS BY THESE PRESENTS:

That \_\_\_\_\_ hereinafter referred to as the "Principal," and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_ authorized to do business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); with its principal office in the City of \_\_\_\_\_, hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah hereinafter referred to as the "Obligee," in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered into a certain written Contract with the Obligee, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, to construct \_\_\_\_\_ in the County of \_\_\_\_\_, State of Utah, Project No. \_\_\_\_\_ for the approximate sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), which contract is hereby incorporated by reference herein.

**NOW, THEREFORE**, the condition of this obligation is such that if the said Principal shall pay all claimants supplying labor or materials to Principal or Principal's Subcontractors in compliance with the provisions of Title 63, Chapter 56, of Utah Code Annotated, 1953, as amended, and in the prosecution of the Work provided for in said Contract, then, this obligation shall be void; otherwise it shall remain in full force and effect.

That said Surety to this Bond, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Contract or to the Work to be performed thereunder, or the specifications or drawings accompanying same shall in any way affect its obligation on this Bond, and does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to the Work or to the specifications or drawings and agrees that they shall become part of the Contract Documents.

**PROVIDED, HOWEVER**, that this Bond is executed pursuant to the provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

**IN WITNESS WHEREOF**, the said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

## WITNESS OR ATTESTATION:

\_\_\_\_\_

## PRINCIPAL:

\_\_\_\_\_

By: \_\_\_\_\_ (Seal)

Title: \_\_\_\_\_

## WITNESS OR ATTESTATION:

\_\_\_\_\_

## SURETY:

\_\_\_\_\_

By: \_\_\_\_\_ Attorney-in-Fact (Seal)

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me \_\_\_\_\_, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My commission expires: \_\_\_\_\_

Resides at: \_\_\_\_\_

NOTARY PUBLIC

**Agency:** \_\_\_\_\_  
**Agent:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

Approved As To Form: May 25, 2005  
By Alan S. Bachman, Asst Attorney General



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES  
**Division of Facilities Construction and Management**

**DFCM**

**CHANGE ORDER # \_\_\_\_\_**

CONTRACTOR: \_\_\_\_\_

AGENCY OR INSTITUTION: \_\_\_\_\_

PROJECT NAME: \_\_\_\_\_

PROJECT NUMBER: \_\_\_\_\_

CONTRACT NUMBER: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

DATE: \_\_\_\_\_

CONSTRUCTION CHANGE DIRECTIVE NO.	PROPOSAL REQUEST NO.	AMOUNT		DAYS	
		INCREASE	DECREASE	INCREASE	DECREASE

	Amount	Days	Date
ORIGINAL CONTRACT			
TOTAL PREVIOUS CHANGE ORDERS			
TOTAL THIS CHANGE ORDER			
ADJUSTED CONTRACT			

DFCM and Contractor agree that the terms, contract sum, scope of the Work and time specified in this Change Order shall constitute the full accord and satisfaction, and complete adjustment to the Contract and includes all direct and indirect costs and effects related to, incidental to, and/or reasonably implied from such change in the contract terms, sum, scope of the Work and time.

Contractor: \_\_\_\_\_ Date \_\_\_\_\_

Architect/Engineer: \_\_\_\_\_ Date \_\_\_\_\_

Agency or Institution: \_\_\_\_\_ Date \_\_\_\_\_

DFCM: \_\_\_\_\_ Date \_\_\_\_\_

Funding Verification: \_\_\_\_\_ Date \_\_\_\_\_



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

**Division of Facilities Construction and Management**

**DFCM**

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

PROJECT \_\_\_\_\_ PROJECT NO: \_\_\_\_\_

AGENCY/INSTITUTION \_\_\_\_\_

AREA ACCEPTED \_\_\_\_\_

The Work performed under the subject Contract has been reviewed on this date and found to be Substantially Completed as defined in the General Conditions; including that the construction is sufficiently completed in accordance with the Contract Documents, as modified by any change orders agreed to by the parties, so that the State of Utah can occupy the Project or specified area of the Project for the use for which it is intended.

The DFCM - (Owner) accepts the Project or specified area of the Project as Substantially Complete and will assume full possession of the Project or specified area of the Project at \_\_\_\_\_ (time) on \_\_\_\_\_ (date).

The DFCM accepts the Project for occupancy and agrees to assume full responsibility for maintenance and operation, including utilities and insurance, of the Project subject to the itemized responsibilities and/or exceptions noted below:

The Owner acknowledges receipt of the following closeout and transition materials:

☐ Record Drawings      ☐ O & M Manuals      ☐ Warranty Documents      ☐ Completion of Training Requirements

A list of items to be completed or corrected (Punch List) is attached hereto. The failure to include an item on it does not alter the responsibility of the Contractor to complete all the Work in accordance with the Contract Documents, including authorized changes thereof. The amount of \_\_\_\_\_. (Twice the value of the punch list work) shall be retained to assure the completion of the punch list work.

The Contractor shall complete or correct the Work on the list of (Punch List) items appended hereto within \_\_\_\_\_ calendar days from the above date of issuance of this Certificate. If the list of items is not completed within the time allotted the Owner has the right to be compensated for the delays and/or complete the work with the help of independent contractor at the expense of the retained project funds. If the retained project funds are insufficient to cover the delay/completion damages, the Owner shall be promptly reimbursed for the balance of the funds needed to compensate the Owner.

\_\_\_\_\_  
CONTRACTOR (include name of firm)      by: \_\_\_\_\_  
(Signature)      DATE

\_\_\_\_\_  
A/E (include name of firm)      by: \_\_\_\_\_  
(Signature)      DATE

\_\_\_\_\_  
USING INSTITUTION OR AGENCY      by: \_\_\_\_\_  
(Signature)      DATE

\_\_\_\_\_  
DFCM (Owner)      by: \_\_\_\_\_  
(Signature)      DATE

4110 State Office Building, Salt Lake City, Utah 84114  
telephone 801-538-3018 • facsimile 801-538-3267 • <http://dfcm.utah.gov>

cc: Parties Noted  
DFCM, Director

# **DIVISION 06 - WOOD AND PLASTICS**

## **06050 BASIC WOOD AND PLASTIC MATERIALS AND METHODS**

06072 WOOD PRESERVATIVE TREATMENT

## **06100 ROUGH CARPENTRY**

06110 WOOD FRAMING

06165 WOOD PANEL PRODUCT SHEATHING

END OF TABLE OF CONTENTS



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## SECTION 06072

### WOOD PRESERVATIVE TREATMENT

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To:
  - 1. Quality of wood preservative treatment where specified.
- B. Related Sections:
  - 1. Section 06110:
    - a. Characteristics of wood to be pressure-treated.
    - b. Furnishing and installing of pressure-treated wood.

##### 1.2 REFERENCES

- A. American Wood-Preserver's Association:
  - 1. AWPA C1-96, 'All Timber Products, Pressure Treatment.'
  - 2. AWPA C2-96, 'Lumber, Timbers, Bridge Ties and Mine Ties, Pressure Treatment.'
  - 3. AWPA C31-xx, 'Lumber Used Out of Contact With the Ground and Continuously Protected from Liquid Water.'
  - 4. AWPA C33-xx, 'Standard for Preservative Treatment of Structural Composite Lumber by Pressure Processes.'
  - 5. AWPA P5-xx, 'Waterborne Preservatives.'
  - 6. AWPA N1-96, 'All Millwork, Preservative Treatment by Non-Pressure Process.'

##### 1.3 SUBMITTALS

- A. Quality Assurance / Control: Certificate of pressure treatment showing compliance with specification requirements and including information required under IBC Section 2303.1.8.1.

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Pressure Treatment Of Wood:
  - 1. Framing lumber grade and species shall be as specified in Section 06110 for particular use.
  - 2. Interior Wood In Contact With Concrete or Masonry:
    - a. Preservatives:
      - 1) Disodium octoborate tetrahydrate (DOT / SBX) meeting requirements of AWPA C31 and with retention of 0.25 lbs per cu ft 4 kg per cu meter.
      - 2) Zinc borate meeting requirements of AWPA C33 and with retention of 0.17 lbs per cu ft 2.7 kg per cu meter.
    - b. Lumber: Treat in accordance with AWPA C31 or C33 and dry after treatment.
    - c. Millwork: Treat in accordance with AWPA N1 and dry after treatment.
  - 3. Exterior Wood Continuously Exposed To Weather:
    - a. Preservatives: Waterborne preservatives meeting requirements of AWPA C2 with retention levels as required by AWPA C2 for specific application.
    - b. Lumber: Treat in accordance with AWPA C2 and dry after treatment.
- B. Acceptable Manufacturers:

1. Arch Wood Protection Inc, Smyrna, GA (770) 801-6600 [www.wolmanizedwood.com](http://www.wolmanizedwood.com).
2. Chemical Specialties Inc, Charlotte, NC (800) 421-8661 or (704) 522-0825. [www.treatedwood.com](http://www.treatedwood.com)
3. Hoover Treated Wood Products, Thomson, GA (800) 832-9663 or (706) 595-7355. [www.frtw.com](http://www.frtw.com)
4. Osmose Inc, Griffin, GA (800) 241-0240. [www.osmose.com](http://www.osmose.com)
5. U S Borax Inc, Valencia, CA (661) 287-5400. [www.borax.com/wood](http://www.borax.com/wood)
6. Equal as approved by Architect before use. See Section 01600.

**PART 3 - EXECUTION: Not Used**

**END OF SECTION**

## SECTION 06110

### WOOD FRAMING

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To:
  - 1. Furnish and install wood framing and blocking as described in Contract Documents.

##### 1.2 REFERENCES

- A. U. S. Department of Commerce:
  - 1. Voluntary Product Standard DOC PS 20-99, 'American Softwood Lumber Standard.'

##### 1.3 SUBMITTALS

- A. Quality Assurance / Control:
  - 1. Technical and engineering data on nails to be set by nailing guns for Architect's approval of types proposed to be used as equivalents to specified hand set nails and adjusted number and spacing of pneumatically-driven nails to provide equivalent connection capacity.
  - 2. Copies of pamphlets specified in REFERENCE Article. After Architect's examination, keep pamphlets on Project site with approved shop drawings. Pamphlets may be obtained from Truss Plate Institute or from Truss Fabricator.

##### 1.4 QUALITY ASSURANCE

- A. Pre-Installation Conference:
  - 1. Schedule pre-installation conference immediately before beginning framing work.
  - 2. Review items such as:
    - a. Nails and nailing requirements.
    - b. Connections.

##### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver material unduly long before it is required.
- B. Store lumber on level racks and keep free of ground to avoid warping. Stack to insure proper ventilation and drainage.

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Dimension Lumber:
  - 1. Meet requirements of PS 20 and National Grading Rules for softwood dimension lumber.
  - 2. Bear grade stamp of WWPA, SPIB, or other association recognized by American Lumber Standards Committee identifying species of lumber by grade mark or by Certificate of Inspection.
  - 3. Lumber 2 inches 50 mm or less in nominal thickness shall not exceed 19 percent in moisture content at time of fabrication and installation and be stamped 'S-DRY', 'K-D', or 'MC15.'

- 4. Lumber shall be S4S.
  - 5. Preservative Treated Plates / Sills:
    - a. **2x4 38 mm by 64 mm**: Standard and better Douglas Fir, Southern Pine, or HemFir, or StrandGuard by Trus Joist, Boise, ID (800) 338-0515 or (208) 364-1200. [www.tjm.com](http://www.tjm.com)
    - b. **2x6 38 mm by 140 mm** And Wider: No. 2 or or MSR 1650f - 1.5e Douglas Fir, Southern Pine, HemFir, or StrandGuard by Trus Joist, Boise, ID (800) 338-0515 or (208) 364-1200. [www.trusjoist.com](http://www.trusjoist.com)
- B. Sill Sealer: Closed-cell polyethylene foam, **1/4 inch 6 mm** thick by width of plate.

## **PART 3 - EXECUTION**

### **3.1 ERECTION**

- A. General: Use preservative treated wood for wood members in contact with concrete or masonry, including wall, sill, and ledger plates, door and window subframes and bucks, etc.
- B. Walls:
  - 1. Sill Plates:
    - a. Masonry Wall Plates:
      - 1) Anchor 2x6 and 2x8 wall plates to top of block walls with **5/8 inch 16 mm** diameter anchor bolts at **32 inches 800 mm** on center unless noted otherwise.
      - 2) Set plates on masonry bearing walls true and level to provide full bearing. Use mortar as specified in Division 04 for leveling if leveling is required.

**END OF SECTION**

## SECTION 06165

### WOOD PANEL PRODUCT SHEATHING

#### PART 4 - GENERAL

##### 4.1 SUMMARY

- A. Includes But Not Limited To:
  - 1. Furnish and install wood panel product sheathing required for walls, roofs, and floors as described in Contract Documents.

##### 4.2 QUALITY ASSURANCE

- A. Pre-Installation Conference: Participate in pre-installation conference specified in Section 06110.

##### 4.3 DELIVERY, STORAGE, AND HANDLING

- A. Protect sheathing and keep under cover in transit and at job site.
- B. Do not deliver material unduly long before it is required.
- C. Store sheathing on level racks and keep free of ground. Stack to insure proper ventilation and drainage.

#### PART 5 - PRODUCTS

##### 5.1 MATERIALS

- A. Sheathing:
  - 1. Meet requirements of PS 1-95, PS 2-92, PRP-108 (APA), or PRP-133 (TECO). Except where plywood is specifically indicated on Drawings, oriented strand board (OSB) is acceptable.
  - 2. Every sheet of sheathing shall be stamped as follows:
    - a. Appropriate APA, TECO, or PFS grade stamp identifying thickness and span rating.
    - b. Sheathing shall be stamped 'Sized for Spacing'.
    - c. Exposure 1 or Exterior.
  - 3. Sheathing shall not exceed 18 percent moisture content when fabricated or more than 19 percent when installed in Project.
  - 4. Sheathing **3/4 inch** thick and thicker used for single-layer subflooring shall be tongue and groove.
  - 5. Sheathing used for same purpose shall be of same thickness. In all cases, thickness specified is minimum required regardless of span rating.
  - 6. Minimum span ratings for given thicknesses shall be as follows:

a.	Thickness	Span Rating
1)	<b>3/8 inch</b>	<b>24/0</b>
2)	<b>15/32 inch actual</b>	<b>32/16</b>
3)	<b>1/2 inch nominal</b>	<b>32/16</b>
4)	<b>19/32 inch actual</b>	<b>40/20</b>
5)	<b>5/8 inch nominal</b>	<b>40/20</b>
6)	<b>23/32 inch actual</b>	<b>48/24</b>
7)	<b>3/4 inch nominal</b>	<b>48/24</b>
8)	<b>9.5 mm</b>	<b>24/0</b>

9)	11.9 mm actual	32/16
10)	12.5 mm nominal	32/16
11)	15.1 mm actual	40/20
12)	15.9 mm nominal	40/20
13)	18.3 mm actual	48/24
14)	19 mm nominal	48/24

B. Nails:

1. **3/8 inch 9.5 mm** panel: 8d common or box.
2. **15/32 inch 11.9 mm** and thicker panels: 10d common or galvanized box.

## PART 6 - EXECUTION

### 6.1 INSTALLATION

A. General:

1. Top of nail heads shall be flush with sheathing surface.
2. Use of edge clips to provide spacing between sheathing panels is acceptable.

B. Wall Sheathing:

1. Spacing: Provide **1/8 inch 3 mm** space between sheets at end and edge joints.
2. Edge Bearing And Blocking:
  - a. Panel edges shall bear on framing members and butt along their center lines.
  - b. Back block panel edges, which do not bear on framing members, with **2 inch nominal 45 mm** framing.
3. Nailing: Place nails not less than **3/8 inch 9.5 mm** in from edge, **12 inches 300 mm** on center along intermediate supports, and **4 inches 100 mm** on center along panel edge and into studs connected to hold-down anchors, unless shown otherwise on Drawings.
4. Size:
  - a. **15/32 inch actual 12 mm** minimum thickness.
  - b. Do not install any piece of wall sheathing with shortest dimension of less than **24 inches 600 mm**.

C. Roof Sheathing:

1. Placing:
  - a. Lay face grain at right angles to supports. Provide blocking for support where framing turns at roof overhang.
  - b. Provide **1/8 inch 3 mm** space between sheets at end and side joints.
  - c. Stagger panel end joints.
  - d. Sheathing shall be continuous of two spans minimum.
2. Nailing:
  - a. Place nails at least **3/8 inch 9.5 mm** in from edge.
  - b. Nail **6 inches 150 mm** on center along supported edges.
  - c. Nail **12 inches 300 mm** on centers on intermediate supports.
  - d. Nail **4 inches 100 mm** on center at:
    - 1) Diaphragm boundaries
    - 2) Blocking above plywood sheathed walls and block masonry walls
    - 3) At shear wall struts and fascias.
3. Size:
  - a. **19/32 inch 15.1 mm** actual minimum thickness.
  - b. Do not install any piece of roof sheathing with shortest dimension of less than **24 inches 600 mm**.

D. Floor Sheathing:

1. Subflooring: Bottom Layer of Two
  - a. Apply bead of glue to structural supports. Lay face grain / strength axis across supports and with panel continuous over two supports minimum.

- b. Nail panel ends at 12 inches 300 mm on center and along intermediate bearing at 24 inches 600 mm on center.
  - c. Allow expansion gap of at least 1/2 inch 12.5 mm at walls.
  - d. Size:
    - 1) 19/32 inch actual 15 mm minimum thickness.
    - 2) Do not install any piece of bottom layer floor sheathing with shortest dimension of less than 24 inches 600 mm.
2. Subflooring: Top Layer of Two or Single Layer.
- a. Stagger joints of second layer subflooring so they do not line up with joints of first layer subflooring.
  - b. Glue subflooring layers together along lines of structural supports.
  - c. Leave 1/32 inch 1 mm gap at side and end joints, except where tongue and groove subflooring is used.
  - d. Nail at 6 inch 150 mm centers on ends and 8 inch 200 mm centers on intermediate structural members.
  - e. Size:
    - 1) 19/32 inch actual 15 mm minimum thickness, except where specifically noted otherwise.
    - 2) Do not install any piece of single layer floor sheathing with shortest dimension of less than 24 inches 600 mm.

## 6.2 PROTECTION

- A. Protect roof sheathing from moisture until roofing is installed.

**END OF SECTION**



## **DIVISION 07 - THERMAL AND MOISTURE PROTECTION**

### **07500 MEMBRANE ROOFING**

07542 THERMOPLASTIC ROOFING / PVC

### **07600 FLASHING AND SHEET METAL**

07621 FLASHING AND COUNTERFLASHING / Galvanized Steel

07631 ROOF FLASHING

### **07900 JOINT SEALERS**

07920 JOINT SEALANTS

END OF TABLE OF CONTENTS

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## SECTION 07542

### THERMOPLASTIC ROOFING / PVC

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited to:
  - 1. Install roofing membrane with flashings and other components to comprise total roofing system as described in Contract Documents.

##### 1.2 REFERENCES

- A. American Society For Testing And Materials:
  - 1. ASTM D 312-00, 'Standard Specification for Asphalt Used in Roofing.'

##### 1.3 SUBMITTALS

- A. Product Data: Roofing Manufacturer's literature or cut sheet for each element of system.
- B. Shop Drawings: Prepared by Roofing Manufacturer or its representative. Include outline of roof and roof size, location and type of penetrations, perimeter and penetration details, special details, and bill of materials.
- C. Quality Assurance / Control:
  - 1. Two copies of Roofing Manufacturer's published specification for Architect and maintain one at job-site.
  - 2. Roofing Manufacturer's certification of Installer.
  - 3. Submit evidence that roof system has been tested and approved or listed as follows:
    - a. FM Class 1-90.
    - b. UL Class A assembly.
- D. Closeout: Submit record shop drawings to Roofing Manufacturer, if requested. Record shop drawings shall be given shop drawing number by Roofing Manufacturer.

##### 1.4 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Roofing system shall be applied by Applicator authorized by Roofing Manufacturer before bid.
  - 2. Membrane and flashing installation shall be performed by personnel trained and authorized by Roofing Manufacturer.
  - 3. Welding equipment shall be provided by or approved by Roofing Manufacturer. Mechanics intending to use equipment shall have successfully completed training course provided by Manufacturer's Technical Representative before welding.
- B. Regulatory Requirements:
  - 1. Metal details, fabrication practices, and installation methods shall conform to applicable requirements of following:
    - a. Factory Mutual Loss Prevention Data Sheet 1-49 (latest issue).
    - b. Sheet Metal and Air Conditioning Contractors National Association Inc, 5th edition.
- C. A pre-installation notice will be submitted by manufacture prior to start of any work. This will include confirmation that the membrane being used meets or exceeds the membrane requirements set fourth. This will also include confirmation that the scope of work is in accordance with published

technical data as per manufacture. This also includes confirmation that a warranty has been requested and will be issued on the DFCM warranty form at the completion of roofing.

## **1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver products job site in original unopened containers or wrappings bearing all seals and approvals.
- B. Handle materials to prevent damage. Place materials on pallets and fully protect from moisture.
- C. Store membrane rolls lying down on pallets fully protected from weather with clean canvas tarpaulins.
- D. Do not store or use flammable adhesives vicinity of open flames, sparks, and excessive heat.
  - 1. Store adhesives at temperatures above 40 deg F 4 deg C.
  - 2. Store flammable materials in cool, dry area away from sparks and open flames. Follow precautions outlined on containers or supplied by material manufacturer/supplier.
- E. Remove from job site materials that are determined to be damaged by Architect or by Roofing Manufacturer and replace at no additional cost to Owner.
- F. Take precautions that storage and application of materials and equipment does not overload roof deck or building structure.

## **1.6 WARRANTY**

- A. Special Warranty: See attached "GUARANTEE FOR SINGLE PLY ROOFING" included in the Owner's RFP. If not found in the RFP, the document may be downloaded from the DFCM's web site.
- B. Special Project Warranty: See attached "CONTRACTOR ROOFING WARRANTY" included in the Owner's RFP. If not found in the RFP, the document may be downloaded from the DFCM's web site.
- C. DFCM Single ply history record: See attached "CONTRACTOR ROOFING WARRANTY" included in the Owner's RFP.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:
  - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified.

### **2.2 PVC ROOFING MEMBRANE**

- A. PVC Sheet: ASTM D 4434, Type III, fabric reinforced.
  - 1. Manufacturers:
    - a. Manufacture must be listed in NRCA's low slope roofing materials guide.
    - b. Manufacture must have a successful 15-year history.
    - c. Manufacture must agree to and be willing to sign the appropriate State of Utah (DFCM) manufacturers warranty for the roofing system.
    - d. Manufacturer will provide at no additional cost to Owner, progress inspections as conditions require and a final warranty inspection at project completion by a full-time technical representative.
  - 2. PVC Requirements

- a. 15-year minimum performance history.
- b. No documented failure in the above 15 year history.
- c. Only sheets with non-migrating plasticizers will be acceptable.
- d. Membrane must be manufactured with non-wicking scrim.
- e. Only balanced sheets will be acceptable. Scrim must be in center of membrane with no less than 20 mils polymer above scrim.
- f. Thickness: 60 mils (57 mil minimum) polymer thickness not over all thickness.

## 2.2 ACCESSORY PRODUCTS

- A. Walkway Pad: Manufacturer approved. Contractor to include 200 linear feet installed as directed by owner. No concrete walkway.
- B. PVC Coated Metal: 0.023 inch 0.56 mm thick G90 galvanized sheet metal laminated with 0.020 inch 0.51 mm thick PVC membrane.
- C. PVC Corner: Prefabricated inside and outside corners made of PVC membrane.
- D. 14 ga 2 mm galvanized U-shaped steel bar with rolled edges and slotted holes punched one inch 25 mm on center used for membrane securement at bases of walls and curbs and as perimeter clamping bar on certain adhered roof assemblies.
- E. Rigid Isocyanurate Foam Insulation Board
  1. Insulation boards shall be Factory Mutual Class 1-90 approved.
  2. Insulation panels directly under roofing membrane shall not exceed 48 inches by 48 inches 1 200 mm by 1 200 mm.
  3. Insulation shall have minimum 'R' value of 20 and thickness of three inch.
- F. Fastener: Self-tapping, corrosion resistant fastener used to attach insulation board or to fasten membrane at changes in slope.
- G. Insulation Plates: 26 ga 0.478 mm, 3 inch 75 mm plate used with fasteners to clamp insulation boards in place or approved by membrane manufacturer.
- H. Prefabricated membrane vent pipe flashing made by membrane manufacturer.

## 2.3 RELATED MATERIALS

- A. Insulation:
  1. FM or UL approved.
  2. Recovery Board:
    - a. 1/2 inch thick minimum wood fiberboard meeting requirements of ASTM C 208.
  3. Top Layer Over Insulation:
    - a. 3 inch thick minimum isocyanurate foam insulation approved by membrane manufacturer. Minimum "R" value R-20.
- B. Miscellaneous Flashing Materials: As supplied by Roofing Manufacturer.
- C. Wood Nailers:
  1. Treat wood nailers for fire and rot resistance (wolmanized or osmose treated), No. 2 quality or better Douglas Fir. Creosote or asphaltic-treated wood is not acceptable.
  2. Wood nailers shall conform to Factory Mutual's Loss Prevention Data Sheet 1-49.
  3. Wood shall have a maximum moisture content of 19 percent by weight on dry weight basis.
- D. Sealants And Pitch Pocket Fillers: As accepted by Roofing Manufacturer under specified warranty.

- E. Miscellaneous Fasteners And Anchors:
1. Fasteners, anchors, nails, straps, bars, etc shall be of post-galvanized zinc or cadmium-plated steel, aluminum, or stainless steel. Mixing metal types and methods of contact shall be in such a manner as to avoid galvanic corrosion.
  2. Fasteners for attachment of metal to masonry shall be expansion type fasteners with stainless steel pins.
  3. Concrete fasteners and anchors shall have minimum embedment of 1-1/4 inch 32 mm and shall be approved for such use by Fastener Manufacturer.
  4. Wood fasteners and anchors shall have embedment of one inch 25 mm minimum and be approved for such use by Fastener Manufacturer.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. General:
1. Verify that roof drain lines are functioning correctly before starting work of this Section. Report blockages in writing to Owner's representative, with copy to Roofing Manufacturer, for corrective action before beginning work of this Section.
  2. Remove existing roofing, base flashing, deteriorated wood blocking, and deteriorated metal flashings. Remove only that amount of existing roofing and flashing that can be made watertight with new materials during a one day period or onset of inclement weather.
  3. Stop work immediately if any unusual or concealed condition is discovered and immediately notify Owner in writing, with letter copy to Roofing Manufacturer.
- B. Inspect for defects such as excessive surface roughness, contamination, structural inadequacy, or any other condition that will adversely affect quality of work.
1. Steel Deck: Bring rusted or deteriorated decking to attention of Owner's representative to determine method of treatment or replacement. Lightly sand rusted metal and treat with rust-inhibiting paint. Remove and replace sections that have rusted through. Deck attachment shall conform to FM Data Sheet I-28 and local code requirements.
- C. Install continuous treated wood nailers at perimeter of entire roof and around roof projections and penetrations as described on Project Drawings. Replace existing wood nailers shown to remain, if they contain rot or are otherwise damaged.
1. Anchor nailers to resist minimum force of 300 pounds per lineal foot in any direction. Provide 1/2 inch 13 mm space between nailer lengths. Individual nailer lengths shall not be less than 36 inches 900 mm long. Nailer fastener spacing shall be at 12 inches 300 mm on center, or 16 inches 400 mm if necessary to match structural framing. Stagger fasteners 1/3 nailer width and install within 6 inches 150 mm of each end. Meet requirements current Factory Mutual Loss Prevention Data Sheet 1-49.
  2. Thickness shall match substrate or insulation height.
  3. Anchor existing woodwork that is to remain so as to resist minimum force of 300 pounds per lineal foot in any direction. Reuse only woodwork designated to be reused in detail drawings.
- D. Substrate shall be clean, smooth, dry, free of flaws, sharp edges, loose and foreign material, oil and grease. Roofing shall not start until defects have been corrected.

### 3.2 INSTALLATION

- A. General:
1. Roof surfaces shall be free of water, ice and snow. Surfaces to receive new insulation, membrane, or flashings shall be dry. Should surface moisture occur, provide equipment necessary to dry surface before application.
  2. Secure new and temporary construction, including equipment and accessories, so as to preclude wind blow-off and subsequent roof or equipment damage.

3. Install only as much roofing as can be made weathertight each day, including flashing and detail work. Clean seams and heat-weld before leaving jobsite.
4. Schedule and execute work without exposing interior building areas to effects of inclement weather. Protect existing building and its contents against all risks.
5. Install uninterrupted waterstops at end of each day's work and completely remove before proceeding with next day's work. Waterstops shall not emit dangerous or unsafe fumes and shall not remain in contact with finished roof as installation progresses. Replace contaminated membrane at no additional cost to Owner.
6. Avoid use of newly constructed roofing as walking surface or for equipment movement and storage. Where such access is required, provide necessary protection and barriers to segregate work area and to prevent damage to adjacent areas. Provide protection layer consisting of plywood over insulation board and roofing membrane for new and existing roof areas that receive rooftop traffic during construction.
7. Before and during application, remove dirt, debris, and dust from surfaces either by vacuuming, sweeping, blowing with compressed air, or similar methods.
8. Report rooftop contamination that is anticipated or that is occurring to Roofing Manufacturer to determine corrective steps to be taken.

**B. Insulation:**

1. Where specified or required, install insulation as recovery layer over existing substrate and to obtain desired thermal value. Existing roof assembly shall be dry.
2. Neatly cut insulation cut to fit around penetrations and projections.
3. Install tapered insulation in accordance with insulation manufacturer's shop drawings.
4. Install tapered insulation around drains creating a drain sump.
5. Do not install more insulation board than can be covered with roofing membrane by end of day's work or onset of inclement weather.
6. Mechanical Attachment:
  - a. Fasten to deck with approved fasteners and plates in accordance with Insulation Manufacturer's, Factory Mutual's, and Roofing Manufacturer's recommendations for fastening rates and patterns. Quantity and locations of fasteners and plates shall also result in insulation boards resting evenly on roof deck/substrate so there are no large cavities or air spaces between boards and substrate.
  - b. Install fasteners in accordance with fastener manufacturer's recommendations. Fasteners are to have minimum penetration into structural deck as recommended by Fastener Manufacturer and Roofing Manufacturer.

**C. Membrane:**

1. Inspect surface of insulation or substrate before installation of roof membrane. Substrate shall be clean, dry and smooth with no excessive surface roughness, contaminated surfaces or unsound surfaces such as broken, delaminated, or damaged insulation boards.
2. Fasten as per membrane manufacturers latest specifications:
3. Hot-Air Welding Of Lap Areas:
  - a. General:
    - 1) Seams shall be hot air welded. Seam overlaps shall be **3 inches 75 mm** wide minimum when automatic machine welding, and **4 inches 100 mm** wide when hand welding.
    - 2) Membrane to be welded shall be clean and dry. No adhesive shall be in seam.
  - b. Hand Welding:
    - 1) Hand welded seams shall be completed in three stages. Allow hot-air welding equipment to warm up for one minute minimum before welding.
    - 2) Seam shall be tack-welded every **36 inches 900 mm** to hold membrane in place.
    - 3) Weld back edge of seam with narrow but continuous weld to prevent loss of hot air during final welding.
    - 4) Insert nozzle into seam at 45-degree angle. Once proper welding temperature has been reached and membrane begins to 'flow', position hand roller perpendicular to nozzle and press lightly. For straight seams, use **1-1/2 inch 38 mm** wide nozzle. Use **3/4 inch 19 mm** wide nozzle for corners and compound connections.
  - c. Machine Welding: Follow Roofing Manufacturer's instructions and use recommended equipment.
  - d. Quality Control of Welded Seams: Check welded seams for continuity using rounded screwdriver. Make on-site evaluation of welded seams daily at locations directed by Owner's

Representative or representative of Roofing Manufacturer. Take **one inch 25 mm** wide cross-section samples of welded seams at least three times a day. Patch each test cut at no additional cost to Owner.

D. Walkway Pads:

1. Install 200 linear feet as per manufacturer requirements. Locate as per owner direction.
2. No concrete walkway pads are allowed on roof system.

E. Flashings:

1. General:

- a. Install flashings concurrently with roof membrane as job progresses. No temporary flashings shall be allowed without prior written approval of Owner's Representative and Roofing Manufacturer. Approval shall only be for specific locations on specific dates.
- b. If water is allowed to enter under newly completed roofing, remove and replace affected area no additional cost to Owner.
- c. Adhere flashings to compatible, dry, smooth, and solvent-resistant surfaces.

2. Membrane Flashings:

a. Adhesive Application for Flashings:

- 1) Apply adhesive using solvent-resistant **3/4 inch 19 mm** nap paint rollers. Apply adhesive in smooth, even coatings with no holidays, globs, or similar irregularities. Coat only area that can be completely covered in same day's operations. Allow surface with adhesive coating to dry completely prior to installing flashing membrane.
- 2) When surface is dry, cut flashing membrane to workable length and evenly coat underside with adhesive at rate of **1/2 gal per 100 sq ft 2 liters per 9 sq meters**. When adhesive has dried sufficiently to produce strings when touched with a dry finger, roll coated membrane onto previously coated substrate being careful to avoid wrinkles. Do not allow adhesive on underside of membrane to completely dry. Overlap adjacent sheets **3 inches 75 mm**. Flashings shall extend **4 inches 100 mm** onto roofing membrane. Press bonded sheet firmly in place with hand roller.
- 3) Apply no adhesive in seam areas that are to be welded.

- b. Extend flashings **8 inches 200 mm** minimum above roofing level unless otherwise accepted in writing by Owner's representative and Roofing Manufacturer.
- c. Adhere flashing membranes to solvent resistant substrates. Cut interior and exterior corners and miters and hot-air weld into place. No bitumen shall be in contact with membrane.
- d. Mechanically fasten flashing membranes along top edge through tin discs or pre-drilled, galvanized metal strip washers spaced at of **12 inches 300 mm** maximum on center.
- e. Terminate flashings according to Roofing Manufacturer's recommended details.

3. Metal Flashings:

- a. Complete metal work in conjunction with roofing and flashings so that watertight condition exists daily.
- b. Install metal to provide adequate resistance to bending and allow for normal thermal expansion and contraction.
- c. Metal joints shall be watertight.
- d. Securely fasten metal flashings into solid wood blocking. Fasteners shall penetrate wood nailer **one inch 25 mm** minimum.
- e. Airtight and continuous metal hook strips are required behind metal fascias. Fasten hook strips **12 inches 300 mm** on center into wood nailer or masonry wall.
- f. Counterflashings shall overlap base flashings **4 inches 100 mm** minimum.
- g. PVC Coated Metal Base Flashings: Space adjacent sheets of PVC coated metal **1/4 inch 6 mm** apart. Fasten ends of PVC coated metal **6 inches 150 mm** on center. Cover joint with **2 inch 50 mm** wide aluminum tape. Hot-air weld **4 inch 100 mm** wide strip of flashing membrane over joint.
- h. PVC Coated Metal Edge Flashing: Fasten metal edge flashings with two rows of post-galvanized flat head annular ring nails, **4 inches 100 mm** on center staggered. Space adjacent sheets of PVC coated metal **1/4 inch 6 mm** apart. Cover joint with **2 inch 50 mm** wide aluminum tape. Hot-air weld **4 inch 100 mm** wide strip of flashing membrane over joint.

F. Temporary Cut-Off:

1. Construct temporary waterstops to provide 100 percent watertight seal. Make stagger of insulation joints even by installing partial panels of insulation. Carry new membrane into waterstop. Seal



- waterstop to deck or substrate so water will not travel under new or existing roofing. Seal edge of membrane in continuous heavy application of sealant as described above. When work resumes, cut-out contaminated membrane and dispose of off-site.
2. If inclement weather occurs while temporary waterstop is in place, provide labor necessary to monitor situation to maintain watertight condition.
  3. If water is allowed to enter under newly completed roofing, remove affected area and replace at no additional cost to Owner.

### **3.3 FIELD QUALITY CONTROL**

- A. Upon completion of installation, and delivery to Roofing Manufacturer by Applicator of certification that installation has been performed in accordance with Contract Documents and Roofing Manufacturer's requirements, installed roofing system shall be inspected by technical representative of Roofing Manufacturer.

### **3.4 CLEANING**

- A. Remove demolished material from site daily to legal dumping area legally authorized to receive such materials.
- B. Remove roofing waste material from site daily to legal dumping area authorized to receive such material.
- C. Site cleanup, including both interior and exterior building areas that have been affected by construction, shall be completed to Owner's satisfaction.
- D. Repair landscaped areas damaged by construction activities at no additional cost to Owner.

**END OF SECTION**

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## SECTION 07621

### FLASHING AND COUNTERFLASHING / Galvanized Steel

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To:
  - 1. Furnish and install flashing, counterflashing, and hold-down clips as described in Contract Documents and not specified to be of other material.

##### 1.2 REFERENCES

- A. American Society For Testing And Materials:
  - 1. ASTM A 653-01, 'Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.'

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Sheet Metal:
  - 1. Galvanized iron or steel meeting requirements of ASTM A 653, G 90.
    - a. 22 ga 0.792 mm for hold-down clips.
    - b. 24 ga 0.635 mm for all other.
  - 2. Finish:
    - a. Metal exposed to view shall have face coating of polyvinylidene Fluoride (PVF<sub>2</sub>) Resin-base finish (Kynar 500 or Hylar 5000) containing 70 percent minimum PVF<sub>2</sub> in resin portion of formula. Thermo-cured two coat system consisting of corrosion inhibiting epoxy primer and top coat factory applied over properly pre-treated metal. Reverse side coating shall be thermo-cured system consisting of corrosion inhibiting epoxy primer applied over properly pre-treated metal.
    - b. Color as selected by Architect from Manufacturer's standard colors.
  - 3. Acceptable Manufacturers:
    - a. Copper Sales Inc, Minneapolis, MN (800) 426-7737 or (612) 576-9595. [www.unaclad.com](http://www.unaclad.com)
    - b. Englert Inc, Perth Amboy, NJ (800) 610-1975 or (732) 826-8614. [www.englertinc.com](http://www.englertinc.com)
    - c. Fabral, Jackson, GA (800) 884-4484. [www.fabral.com](http://www.fabral.com)
    - d. Integris Metals, Minneapolis, MN (800) 328-7800 or (763) 717-9000. [www.integrismetals.com](http://www.integrismetals.com)
    - e. Metal Sales Manufacturing Corp, Sellersburg, IN (800) 999-7777 or (812) 246-1866. [www.mtlsales.com](http://www.mtlsales.com)
    - f. Petersen Aluminum Corp, Elk Grove, IL (800) 323-1960 or (847) 228-7150. [www.pac-clad.com](http://www.pac-clad.com)
    - g. Reynolds Metals Company, Richmond, VA (800) 841-7774 or (804) 281-2636. [www.rmc.com](http://www.rmc.com)
    - h. Equal as approved by Architect before installation. See Section 01600.
- B. Screws, Bolts, Nails, And Accessory Fasteners: Of strength and type consistent with function.

##### 2.2 FABRICATION

- A. Form accurately to details.

- B. Profiles, bends, and intersections shall be even and true to line.
- C. Fold exposed edges 1/2 inch 13 mm to provide stiffness.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. Install with small, watertight seams.
- B. Slope to provide positive drainage.
- C. Provide sufficient hold down clips to insure true alignment and security against wind.
- D. Provide 4 inch 100 mm minimum overlap.
- E. Allow sufficient tolerance for expansion and contraction.
- F. Insulate work to prevent electrolytic action.

#### **3.2 CLEANING**

- A. Leave metals clean and free of defects, stains, and damaged finish.

**END OF SECTION**

## SECTION 07631

### ROOF FLASHING

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Related Sections:
  - 1. Section 07920: Quality of sealants.

##### 1.2 REFERENCES

- A. American Society For Testing And Materials:
  - 1. ASTM A 653-01, 'Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.'

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Drip Edge:
  - 1. Metal:
    - a. Steel: Minimum 24 ga 0.635 mm, hot-dipped galvanized to meet requirements of ASTM A 653, 1.25 oz/sq ft.
  - 2. Finishes:
    - a. Face coating polyvinylidene Fluoride (PVF<sub>2</sub>) Resin-base finish (Kynar 500 or Hylar 5000) for coil coating components containing 70 percent minimum PVF<sub>2</sub> in resin portion of formula. Thermo-cured two coat system consisting of corrosion inhibiting epoxy primer and top coat factory applied over properly pre-treated metal.
    - b. Reverse side coating of steel flashings to be thermo-cured system consisting of corrosion inhibiting epoxy primer applied over properly pre-treated metal.
    - c. Color as selected by Architect from Manufacturer's standard colors.
  - 3. Acceptable Manufacturers:
    - a. Copper Sales Inc, Minneapolis, MN (800) 426-7737 or (612) 576-9595. [www.unaclad.com](http://www.unaclad.com)
    - b. Englert Inc, Perth Amboy, NJ (800) 610-1975 or (732) 826-8614. [www.englertinc.com](http://www.englertinc.com)
    - c. Fabral, Jackson, GA (800) 884-4484. [www.fabral.com](http://www.fabral.com)
    - d. Integris Metals, Minneapolis, MN (800) 328-7800 or (763) 717-9000. [www.integrismetals.com](http://www.integrismetals.com)
    - e. Metal Sales Manufacturing Corp, Sellersburg, IN (800) 999-7777 or (812) 246-1866. [www.mtlsales.com](http://www.mtlsales.com)
    - f. Petersen Aluminum Corp, Elk Grove, IL (800) 323-1960 or (847) 228-7150. [www.pac-clad.com](http://www.pac-clad.com)
    - g. Reynolds Metals Company, Richmond, VA (800) 841-7774 or (804) 281-2636. [www.rmc.com](http://www.rmc.com)
    - h. Equal as approved by Architect before installation. See Section 01600.

##### 2.2 FABRICATION

- A. Profiles, bends, and intersections shall be even and true to line.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

- A. Interface with other work.

**END OF SECTION**

## SECTION 07920

### JOINT SEALANTS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To:
  - 1. Furnish and install sealants not specified to be furnished and installed under other Sections.
  - 2. Quality of sealants to be used on Project not specified elsewhere, including submittal, material, and installation requirements.
- B. Related Sections:
  - 1. Removing existing sealants specified in Sections where work required.
  - 2. Furnishing and installing of sealants is specified in Sections specifying work to receive new sealants.

##### 1.2 SUBMITTALS

- A. Product Data:
  - 1. Manufacturer's literature and installation recommendations for each Product.
  - 2. Schedule showing joints requiring sealants. Show also backing and primer to be used.
- B. Quality Assurance / Control: Certificate from Manufacturer indicating date of manufacture.

##### 1.3 DELIVERY, STORAGE, AND HANDLING

- A. Handle to prevent inclusion of foreign matter, damage by water, or breakage.
- B. Deliver and keep in original containers until ready for use.
- C. Do not use damaged or deteriorated materials.
- D. Store in a cool place, but never under 40 deg F 4 deg C.

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Sealants:
  - 1. Sealants provided shall meet Manufacturer's shelf-life requirements.
  - 2. Exterior Building Elements:
    - a. Parapet caps.
    - b. Other joints necessary to seal off building from outside air and moisture.
    - c. Approved Products:
      - 1) Dow Corning:
        - a) Primer: 1200.
        - b) Sealant: 791.
      - 2) General Electric:
        - a) Primer: SS4044.
        - b) Sealant: Silpruf SCS 2000.
      - 3) Tremco:

- a) Primer:
      - (1) Metal: No. 20.
      - (2) Other: No. 23.
    - b) Sealant: Spectrum 1.
  - 3. Exterior Sheet Metal And Miscellaneous:
    - a. Roof vents and flues.
    - b. Flashings.
    - c. Gutters.
    - d. Approved Products:
      - 1) 791 or 790 by Dow Corning.
      - 2) Sikaflex 15LM by Sika Corp.
      - 3) Tremsil 600 by Tremco.
  - 4. Color: As selected by Architect from Manufacturer's standard colors.
- B. Backing: Flexible closed cell, non-gassing polyurethane or polyolefin rod or bond breaker tape as recommended by Sealant Manufacturer for joints being sealed.

## 2.2 MANUFACTURERS

- A. Contact Information:
- 1. Dow Corning Corp, Midland, MI (800) 248-2481 or (989) 496-6000. [www.dowcorning.com](http://www.dowcorning.com)
  - 2. G E Silicone Products, Waterford, NY (800) 255-8886 or (518) 237-3330  
[www.ge.com/silicones/sealants](http://www.ge.com/silicones/sealants).
  - 3. Sika Corporation, Lyndhurst, NJ (800) 933-7452 or (201) 933-9379 [www.sika.com](http://www.sika.com).
  - 4. Tremco, Cleveland, OH (800) 321-7906 or (216) 292-5000 [www.tremcosealants.com](http://www.tremcosealants.com).

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Remove existing sealants where specified. Surfaces shall be clean, dry, and free of dust, oil, grease, dew, or frost.
- B. Apply primer.
- C. Joint Backing:
  - 1. Rod for open joints shall be at least 1-1/2 times width of open joint and of thickness to give solid backing. Backing shall fill up joint so depth of sealant bite is no more than 3/8 inch 10 mm deep.
  - 2. Apply bond-breaker tape in shallow joints as recommended by Sealant Manufacturer.

### 3.2 APPLICATION

- A. Apply sealant with hand-calking gun with nozzle of proper size to fit joints. Use sufficient pressure to insure full contact to both sides of joint to full depth of joint. Apply sealants in vertical joints from bottom to top.
- B. Tool joints immediately after application of sealant if required to achieve full bedding to substrate or to achieve smooth sealant surface. Tool joints in opposite direction from application direction, i.e., in vertical joints, from the top down. Do not 'wet tool' sealants.
- C. Depth of sealant bite shall be 1/4 inch 6 mm minimum and 1/2 inch 13 mm maximum, but never more than one half or less than one fourth joint width.
- D. Do not apply calking at temperatures below 40 deg F 4 deg C.



### **3.3 CLEANING**

- A. Clean adjacent materials, which have been soiled, immediately (before setting) as recommended by Manufacturer.

**END OF SECTION**